

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re:	Application No. 10/681,649)	<i>Confirmation No. 6105</i>
Filed:	October 8, 2003)	
)	
Applicants:	Amy L. NEHLS et al.)	_____ This Appellants' Reply Brief on Appeal was electronically filed on November 17, 2009 using EFS-Web.
Title:	APPARATUS AND METHOD FOR SURFACE TREATMENT OF A FOOD PRODUCT)	
)	
Art Unit:	1794)	
Examiner:	Viren A. THAKUR)	
	_____)	
Attorney Docket:	1410/67565)	
)	
Customer No.:	48940)	

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P. O. Box 1450
Alexandria, Virginia 22313-1450

APPELLANTS' REPLY BRIEF UNDER 37 C.F.R. § 41.41

Sir:

Pursuant to 37 C.F.R. § 41.41, the Applicants hereby respectfully submit the following Reply Brief in response to the Examiner's Answer of September 17, 2009.

For the most part, the Examiner has not raised new arguments in his Answer, and hence the contents of the earlier-submitted Appeal Brief remain relevant. However, several specific errors that are highlighted by the Examiner's Answer are discussed below.

I. No *Prima Facie* Case of Obviousness For Independent Claim 1

Independent claim 1 requires that "the food product have a length greater than the interior length of the steam sleeve such that the food product simultaneously extends beyond both the entrance and the exit..." The Examiner's Answer, pages 4 and 5, admits that this element is not disclosed in the primary reference, U.S. Patent No. 5,439,694 ("Morris"). However, the Examiner's Answer, page 5, alleges that this missing element of Morris can be found in Figure 1 of U.S. Patent No. 3,620,766; Figure 1, section 19 of U.S. Patent No. 3,052,559 ("Peebles"); and Figure 1, item 12 and Figure 5, item 18 of U.S. Patent No. 4,782,643 ("Stark"). As summarized in detail below, the secondary references fail to provide the missing element of Morris; thus, a *prima facie* case of obviousness has not been made.

Figure 1 of Wallace depicts multiple wieners 20 that are fed through an oven or furnace 30. First, the oven or furnace 30 of Figure 1 of Wallace is not a "steam sleeve for generating a flow of steam...to treat the outer surface of the food products" as required by claim 1. Second, no one wiener 20 extends through both the entrance and the exit of the oven or furnace 30 of Wallace.

Figure 1 of Peebles discloses horizontal rollers 19 and squeezing rollers 20. These rollers are not a "steam sleeve." Peebles discloses a sterilizing portion 18A of its housing. However, the containers of Peebles each have a length shorter than the length of the sterilizing portion 18A, and thus cannot simultaneously extend beyond both the entrance and exit thereof.

Figure 1 Stark disclose heating and cooling zones V and K for heating and cooling liquid 6 in a tube 3. Figure 5 of Stark discloses structure with similar functions. However, the heating and cooling zones do not have a flow of steam contacting the

outer surface of a food product. Instead, the heating and cooling zones only contact the tube 3 surrounding the liquid 6.

"To prevent the use of hindsight based on the invention to defeat patentability of the invention, [the Federal Circuit] requires the examiner to show a motivation to combine the references that create the case of obviousness." *In re Rouffet*, 149 F.3d at 1357. "The suggestion to combine requirement stands as a critical safeguard against hindsight analysis and rote application of the legal test for obviousness." *Id.* A lack of motivation equates to a lack of a *prima facie* case of obviousness. *Id.* at 1358. The Examiner's Answer, page 5, argues that "[s]ince the art taken as a whole teaches that it was conventional to treat the outer surface of a conventional food product such that the food product has a length that blocks both the entrance and exit of the treatment zone, to therefore block the entrance and exit of the steam chamber would have been an obvious matter of design choice." This is not an identification of motivation for the proposed combination. Indeed, there is a lack of identification of legally cognizant motivation. For at least this additional reason, the Examiner has failed to make a *prima facie* case of obviousness.

Further, the applied references teach away from the proposed combination, as explained in the Appellant's Opening Brief. The Examiner's Answer, pages 18 and 19, attempts to dismiss the evidence of teaching away, arguing that the discussed advantages are not commensurate with the claims. However, the discussed advantages result from the methods and structures claimed and the applied references teach away from the proposed combination, as discussed in Appellant's Opening Brief. This is yet another reason why a *prima facie* case of obviousness does not exist or has been rebutted.

II. No *Prima Facie* Case of Obviousness For Independent Claim 28

Independent claim 28 requires "circulating the flow of steam in the steam sleeve within a channel formed in the interior wall of the sleeve..., the channel inwardly open to an interior of the sleeve while the food product is passing therethrough.

The Examiner's Answer, page 7, alleges that U.S. Patent No. 3,005,716 ("Moreland") discloses the claimed channel, and proposes to combine Moreland with Morris, Wallace, Peebles and Stark. The Examiner's Answer, pages 15 and 16, makes a separate rejection of claim 28, proposing to combine U.S. Patent No. 5,711,981 ("Wilson") with Moreland. The Examiner Answer points to Moreland for the disclosure of the claimed inwardly open channel.

Specifically, the Examiner's Answer points to item 43 of Moreland and column 3, lines 37-43. Item 43 is described in Moreland as a helical channel. However, the channel 43 is open toward a tube 19, which in turn has food material in it. Accordingly, any fluid circulating the channel 43 of Moreland will not contact the food, but rather the tube 19. Thus, the proposed combination will not result in the claimed invention.

The Examiner's Answer contends that the tube 19 that contains the food emulsion can be ignored and that its removal would provide the claimed channels. However, the removal of the tube would destroy the functionality of the Moreland reference as the emulsion passing through the tube would no longer be contained and would flow into the helical channel thereby modifying the Moreland reference unsatisfactory for its intended purpose. If a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984); MPEP 2143.01.

Further, the tube 19 in Moreland functionally separates the food product contained within the tube from the heated liquid that heats the exterior of the food, thereby inherently eluding the problems associated with moisture residence on the surface of the food product. Therefore, the presence of the tube between the channels prevents direct contact of the heating medium with the food product. As previously stated, the removal of this tube would destroy the function of Moreland.

III. The Examiner's Answer Disregards the Express Teaching Away of Wilson

Wilson is relied upon for the rejections of dependent claims 3-7, 10, 12-16 and 29-31, as well as independent claim 28. The Examiner's Answer asserts that Wilson discloses that the formation of moisture on the surface of the food product within the steam chamber is not desired because it takes heat energy away from the food and thus lowers the sterilization temperature (*e.g.* Examiner's Answer, page 20). This is contrary to the disclosure of Wilson, which explicitly describes the importance of steam condensation:

Steam condenses on the surface of meat M. The condensation of steam 60 onto the surface of meat M produces a transfer of heat energy, specifically the change-of-state energy from steam 60, to the surface of meat M. This transfer of energy heats the surface of meat M very quickly and effectively to kill any pathogens residing thereon.

(Col. 7, ll. 1-6.) Thus, Wilson encourages the formation of condensate and this condensate then drips off of the meat. Conversely, the function of the claimed steam sleeve is to remove condensation that forms on the surface of the food product. For example, claim 3 includes introducing the steam into the channel with a tangential velocity effective to generate a circular flow directing at least some of the steam condensation away from the outer surface of the food product. Accordingly, Wilson

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teaches away from the claims to which it is applied, as was discussed in greater detail in the Appellant's Opening Brief.

IV. Conclusion

It is respectfully submitted that the Examiner has failed to make a *prima facie* case of obviousness of claims 1-16 and 28-32, as well as a case that has not been rebutted. Accordingly, reversal of the Examiner's final rejection and allowance of claims 1-16 and 28-32 are respectfully requested.

Respectfully submitted,

FITCH, EVEN, TABIN & FLANNERY

Dated: November 17, 2009

/Jon A. Birmingham/
Jon A. Birmingham
Registration No. 51,222

120 South LaSalle Street, Suite 1600

Chicago, Illinois 60603-3406

Telephone (312) 577-7000

Facsimile (312) 577-7007

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